

Industrial Engineer

What Do They Do?

Industrial engineers work to find the best way of using equipment, machinery, people and information in making products or supplying a service. The work of an Industrial Engineer deals more with people, organizations and business methods than other engineering professions, which generally work more with products or processes. Most Industrial Engineers work in manufacturing industries, but they may also work in consulting services, healthcare and communications.

Industrial Engineers find ways to improve the work environment and make the workplace better for the employees. They design and implement ways to increase productivity by simplifying work methods, and improving the layout of equipment and office systems. Some design or improve systems for distributing goods and services. This might include deciding which plant location has the best combination of materials available, transportation facilities and costs. Engineers with similar duties in non-industrial settings may have such titles as Operations, Systems or Management Engineers.

What Do I Have To Do To Be One?

Some courses to take in high school to prepare you for this occupation include Math and Science, Social Science and Computer Science. Electronics, Drafting and Drawing, Communications and English are also very helpful.

To be an Industrial Engineer, you should like activities that are scientific and technical. You should also like activities having to do with processes and methods and activities involving business contact with people. You should be able to think logically, present your ideas effectively both orally and in writing and rate information using standards that can be measured or checked.

A Bachelor of Science in Industrial Engineering, Industrial Management or a related engineering degree, is almost always essential for entering this occupation.

How Much Do They Make?

Salaries of Industrial Engineers usually depend on their education level, work experience, area of specialization and level of responsibility. The type, size and location of the employer also come into play.

Nationally, college graduates (late 2003) with a bachelor's degree in Industrial Engineering were offered average annual starting salaries of \$47,051. Those with a master's degree were offered an average of \$54,565. The median salary for all Industrial Engineers in 2003 was \$59,488. Licensed professional Industrial Engineers earned median annual salaries of \$89,129. Highly experienced Industrial Engineers working in supervisory positions earned up to \$121,35 or more per year in early 2004.

Most Industrial Engineers begin as trainees. With experience they are usually assigned to positions in safety, manufacturing, methods, or production supervision. Many Industrial Engineers advance to supervisory and administrative positions. Advancement depends mainly on education. Top-level positions require proven ability in the particular work.

What Can I Expect From The Job Market?

Nationally, there were about 155,800 Industrial Engineers employed in 2002. Employment of these Engineers is expected to increase about as fast as the average for all occupations for the year 2012.

The number of Industrial Engineers working in Michigan is not known. The demand for this profession in Michigan is depends on economic activity, particularly in the auto industry, However, continued expansion of automated processes and the increasing importance of scientific management in reducing costs and increasing productivity in industrial and non-industrial settings will create employment opportunities for Industrial Engineers.

For more details on this occupation, click here: [Industrial Engineer Career Information](#)

Factoid

Industrial engineers figure out how to do things better. They work to eliminate waste of time, money, materials, energy, and other commodities. Most important of all, Industrial Engineers work to save their companies money. Although most Industrial Engineers work in manufacturing industries, they may also work in consulting services, healthcare and communications.

Some courses to take in high school to prepare you for this occupation include Math and Science, Social Science and Computer Science. Electronics, Drafting and Drawing, Communications and English are also very helpful.

The median salary for all Industrial Engineers in 2003 was \$59,488. Licensed professional Industrial Engineers earned median annual salaries of \$89,129. Highly experienced Industrial Engineers working in supervisory positions earned up to \$121,35 or more per year in early 2004.